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SCIENCE AND THE TRANSFORMATION OF COMMON SENSE: THE BASIC PROBLEM OF DEWEY'S PHILOSOPHY

THE scheme of this paper falls into three sections. In the first I wish to indicate in a summary way the genesis of Dewey's conception of philosophy and his belief that it is the conflict between common sense and science which creates the basic problems of modern thought. In the second part I shall give a brief exposition of Dewey's attempted solution of the two most fundamental problems generated by this conflict of common sense with science. These two problems, which for him were correlative, are (1) that of the relation of "scientific objects" to "common-sense objects" and (2) that of the relation of "scientific judgments" to questions of value. In the final section I wish to examine two criticisms, one by Professor Ernest Nagel and one by Professor Morton G. White, of Dewey's solution of these problems, criticisms which, if they were valid, would undermine the foundations of Dewey's philosophy.

I

Dewey's intellectual development was one in which he gradually became aware that the objective idealism he had initially adopted, because it presumes that "the ideal is already and eternally a property of the real," could never be made consistent with a belief that men can act here and now to make their world a better place to live in. Of the many influences which motivated Dewey in working himself out of this difficulty, the crucial one, I think, was the teleological conception of mental activities so brilliantly and originally developed by William James in his *Principles of Psychology*. What Dewey discovered in James was the naturalistic basis for the practical idealism that was coming, increasingly, to dominate his thinking.

The fusion of this evolutionary conception of the function of intelligence with the Hegelian view, which Dewey already held, that the workings of the mind are objectively expressed in social traditions and institutions, is the matrix out of which Dewey's subsequent philosophy develops. To integrate these two divergent types of influences in a way that will produce a coherent philosophy

is henceforth the constant preoccupation of his thought. Taking these two influences together, one comes out with the conception that philosophy has an essentially social function, to mediate the conflict between "a stubborn past and an insistent future." This, Dewey believes, is what philosophers *do*, no matter what they may profess to be doing. During modern times the dominant preoccupation of all philosophy has been to mediate the conflict between traditional institutions inherited from a pre-scientific age—that is, the meanings which people ordinarily attach to those funded ways of living we denote by the term "common sense"—and an insistent future imposed by the cumulative effects of scientific inquiry.

This impact of science takes two correlative forms, the transformation of our modes of living through technology and the transformation of the meanings of the events which constitute our lives. Science Dewey regards as the uniquely instrumental art. Its function is to transform all other modes of practice in such a way that they will become more meaningful than they now are. Such transformations occur in an obvious way in the field of technological change. However, the new meanings of these altered modes of daily living do not become spontaneously apparent. Here, for Dewey, is the locus of his major philosophic problem. How can our modes of practice become more completely informed by scientific knowledge? From this point of view, he regards the real scientific revolution as yet to come.

The difficulty is that while science originates from a matrix of common-sense activities, the relation has heretofore been largely a one-way affair. Science takes its departure from common sense but the return road has been blocked. So far the effect of scientific inquiry upon common-sense modes of thinking and acting has been largely disintegrative and negative in character. The result is a basic cleavage in modern culture. There are now two conflicting elements within common sense itself. The emergence in modern times of experimental science resulted in a new kind of knowledge that seemed utterly at variance with our traditional beliefs. The results of the new science were too upsetting; segregation seemed on the whole easier than assimilation; the consequence was what one might fairly call (for it is a tragic malady of thought) a schizophrenic strain that runs through all our culture. Hence, Dewey believes that the "problem of restoring integration and cooperation between man's beliefs about the world in which he lives and his beliefs about the values and purposes that should direct his conduct is the deepest problem of modern life. It is the problem of any philosophy that is not isolated from that life."[1]

[1] *The Quest for Certainty*, p. 255.

II

The basic task for the philosopher is to do what *he* can to reinstate integrity where this division now exists. In making this attempt he is at the outset confronted with *two* fundamental problems. One of these is that of the relation between "common-sense objects" and "scientific objects," the other is that of the relation between "scientific judgments" and "judgments of value." These two problems are, for Dewey, inseparable because he believes that one and the same method can be and should be employed in those determinations of fact and discoveries of relations which we commonly call uses of scientific method and the appraisals and decisions which constitute what we call the formulation of value judgments. To solve these problems a unified method is necessary. "The attainment of unified method," says Dewey, "means that the fundamental unity of the structure of inquiry in common sense and science be recognized, their difference being one in the problems with which they are directly concerned, not to their respective logics." [2]

What, then, is Dewey's conception (as I understand it), first, of the relation between the objects of common sense and scientific objects and, second, of the relation of scientific judgments to value judgments? The key word to bear in mind when answering these questions is the term "interaction." For Dewey everything given in experience is experienced as a set of interactions going on within what he would call the "situation." There are many levels of interaction and they may be of all degrees of complexity. The primary levels we distinguish as physico-chemical, as psycho-physical, and as social. What Dewey calls experience is for us the prototype of all these modes of interaction. We must perforce make all our judgments as live creatures in their environment. What we know can be known only by means of the actions and reactions occurring within our experience. This being our situation, all of our knowledge is inherently a knowledge of relations.

The "environment in which human beings are *directly* involved" is the "world" of common sense. In this meaning of the term, "common sense" refers to "behavior in its connection with the *significance* of things." Common sense also has the meaning of "the general sense, feeling, judgment of mankind or a community." These two meanings are connected. "Both are concerned, one directly and the other indirectly, with the 'ordinary affairs of life,'" with the practical problems of use and enjoyment.[3]

[2] *Logic: The Theory of Inquiry*, p. 79.
[3] *Ibid.*, pp. 60–63.

For this reason the objects of common sense are primarily qualitative, the objects of use and wont. Common-sense objects are the creatures of habit. They are "the standardized objects of reference designated by common nouns."[4] Our experience, though, is inherently transitive. What we actually have *in* it is a series of "thises." Hence a distinction must be made between *this* table which is something here and now, something "had" at the moment in our experience, and what we call *the* table. What we call *the* table is "the constancy among the serial thises"; *the* table denotes an ordering and organizing of responses, a habit which renders the particular thises significant as instances. The thises are something "had" or "given," the ingredients of our experience, as it were; knowledge is concerned not with them but with the standardized and averaged set of properties and relations which we call *the* table. Thus the table as an *object of knowledge* does not "exist"; what exists is the complex series of events, which are referred to by the term, "*the* table."

Now it is Dewey's contention that there is no logical difference in *kind* between common-sense objects, the objects of knowledge which we call ships and sails and sealing wax, and scientific objects, the objects which we refer to as electrons and magnetic fields and genes. Both are ways of organizing the flux of thises within our experience. The difference between common-sense objects and scientific objects is a practical, not a logical one. "Objects," says Dewey, "are events with meanings."[5] When a series of events is taken on the level of our reactions to it as qualitative, it is known as a common-sense object. And the *same* series of interactions or events may be taken or construed in many different ways. What is taken as having the set of uses ordinarily ascribed to it as a "table" might in a certain sort of emergency be taken as "firewood." But this same series may also be taken in a radically disparate way. Scientific conceptions are a mode of construing events that is indifferent to any and all *qualities*. The scientist substitutes *data* for common-sense objects.[6] What he is interested in is the relations upon which the occurrence of qualities depends. It is those relations which constitute the objects of scientific knowledge.[7]

If this analysis is correct, then Dewey is also right in his contention that there is not and cannot be any competition for the post of superior reality as between common-sense and scientific objects.

[4] *The Quest for Certainty*, p. 237.
[5] *Experience and Nature*, p. 318.
[6] *The Quest for Certainty*, p. 99.
[7] *Ibid.*, pp. 105–106.

There is only one *table,* which may be designated at a given moment as "*this* table" or spoken of as "*the* table" (as a coördinated series of thises), or referred to as an example of cellulose having a certain molecular structure. In the last case the "tabularity" which constitutes the common-sense object is not mentioned, but neither is it impugned. "Table, table, which is the real table" may be an engrossing game like "button, button, who's got the button," but it is a game because it is concerned with a pseudo-problem. The *real* problem is not one of rival existences but of interactions. This is a *practical* problem. The problem is two-fold: (1) How does common sense at any time impede or promote the activities of science as an institution? (We all know what happened to ethnology in Nazi Germany and to genetics in the Soviet Union.) And (2) to what extent can the practice of science inform, render more significant the objects of common sense? *This* is the problem of the relation of scientific judgments to value judgments.

Common-sense objects, because they are objects of use and wont, are inherently qualitative. They are given in our experience as finalities. As such we attend to them primarily as objects of desire and aversion. They *are* what we happen at the time to want or not to want. It is this concern which forces us to notice the ways in which these objects seem to depend upon one another and to utilize some of them as means to the securing of others. This means-end relation when it deals merely with observed sequences is opaque. Our concern with security forces us to look more closely, to discern beneath the sequence of means-end the lineaments of cause and effect. Scientific knowledge thus gives "an added depth, range and fullness of meaning" to the objects of ordinary experience[8]; it renders intelligible the otherwise opaque means-end relation and thus enables a greater degree of security in the prediction and control of the objects of aversion and desire.

This is not a narrowly utilitarian view of the practical effects of science, for when the means become intelligible, ends are themselves transformed. "Knowledge" is for Dewey something liberal and humane. "It signifies events understood, events so discriminately penetrated by thought that mind is literally at home in them."[9] What was initially *desired* may not now be thought *desirable* and if the same thing is still desired that is true only in the blanket sense of the word "same." For the effect of knowing the underlying causal relations is that means and ends are no longer mere conjunctions, externally related; they are now viewed

[8] *Ibid.*, p. 191.

[9] *Experience and Nature*, p. 161.

as temporal distinctions within one continuous process. Any increase in our knowledge of the means effects a transformation in the character of the end. It is this "interpretation of means and ends" which is effected by scientific knowledge.

This sort of informed conduct is for Dewey the standard of value. The "'end,' of growth of present action in shades and scope of meaning is," he says, "the only good within our control, and the only one, accordingly, for which responsibility exists."[10]

Dewey's conception of the relation of scientific judgments to evaluations is, then, a simple one. Common-sense objects are finalities which we are concerned to have or to avoid. An enhanced knowledge of the means to these ends transforms the ends. This knowledge is given us by scientific inquiry. Hence, common-sense objects as finalities are themselves transformed insofar as scientific knowledge is applied as a means of controlling their occurrence. This is how scientific inquiry can modify our values. Science as the uniquely instrumental art has its chief use as an instrument for the construction of the good.

III

Dewey's attempt to solve these basic problems has been subject, of course, to recurrent criticisms. I wish to consider in the concluding part of this paper two recent criticisms, one by Professor Ernest Nagel of Dewey's conception of the relation between scientific objects and the objects of common sense,[11] and the argument advanced by Professor Morton G. White against Dewey's attempt to assimilate value judgments to scientific judgments.[12] In my opinion, both these criticisms are decisive objections, if they are well founded, to Dewey's solutions of these problems. However, they are both, I believe, based upon misapprehensions of his arguments.

No one is better qualified to be a sympathetic and competent critic of Dewey's theory of science than Professor Nagel. Dewey's thesis he states as follows: "The central thesis of Dewey's theory of science is that it does not disclose realms of being antithetical to the familiar things of life, simply because scientific objects are formulations of complex relations of dependence between things in

[10] *Human Nature and Conduct* (New York, 1922), pp. 280–281.

[11] "Dewey's Theory of Natural Science," in *John Dewey: Philosopher of Science and Freedom*, edited by Sidney Hook (New York, 1950).

[12] "Value and Obligation in Dewey and Lewis," *Philosophical Review*, Vol. 58 (1949), pp. 321–329, and *Social Thought in America: The Revolt Against Formalism*, ch. XIII, "Is Ethics an Empirical Science?" (New York, 1949).

gross experience."[13] But this statement as it stands is too vague. What is meant by these "complex relations of dependence"? It is in defining what this phrase means that I think Professor Nagel goes astray. After stating the familiar distinction between two types of scientific theories, "macroscopic" theories which eschew all hypotheses that assume unobservable mechanisms and the "microscopic" theories which explicitly claim that there are particles and mechanisms not open to direct observation, Professor Nagel proceeds (if I correctly understand him) to infer that Dewey's theory of science is a generalization from the macroscopic type of theory. As a result, Dewey's view is open to the objection that, "The impressive successes of atomic and electronic theories of matter in predicting and bringing into systematic order a wide variety of phenomena, have convinced a good fraction of contemporary scientists that the scientific objects postulated by theories of this type are more than systems of relations between familiar objects, and that on the contrary these scientific objects are concrete individuals, possessing spatio-temporal locations and participating in dynamic transactions with each other."[14]

However, Professor Nagel adds, "It must be acknowledged that on this point Dewey is not free from ambiguity," and then goes on to say that Dewey "must cause discomfort even to a sympathetic reader when he writes of swarms of atoms and electrons moving rapidly, or of atoms giving rise to qualities of bitter and sweet. For surely, modes of activity, formulations, correlations, and the rest, cannot intelligibly be said to engage in motions rapid or otherwise, or to give birth in time to sensory qualities."[15] Now Professor Nagel is, I think, understating his case when he concludes that, "It is, perhaps, doubtful whether these apparent inconsistencies in Dewey's statements can be reconciled." If Professor Nagel's analysis of Dewey is correct on this point, then they are real inconsistencies.

My own view is that by converting an ambiguity in Dewey's prolix and often loose statements about "scientific objects" into a real inconsistency, Professor Nagel comes out with a reversed version of the same dualism which Dewey's whole theory is intended to obviate. According to Professor Nagel's analysis, all that Dewey has done is to defend the existence of common-sense objects by denying the reality of scientific objects. But this position can be no more satisfactory for Dewey than the one he set out

[13] *Op. cit.*, p. 236.
[14] *Ibid.*, p. 242.
[15] *Ibid.*, p. 242.

to attack—namely, a dualism which asserted that only atoms, molecules, etc., are really real and ordinary common-sense objects are merely their appearances. *Now,* it would seem, according to Professor Nagel, that, for Dewey, common-sense objects are the really real and what scientists call "atoms" and "molecules" exist merely as peculiar products of the scientist's conceptual imagination.

For Dewey this reversed dualism would be equally damnable—damnable because it also provides no way of understanding the relations of ordinary objects to one another. Clearly the reason for invoking unobservables is that it does not make sense to say that ordinary objects can *as such* produce one another. The view Professor Nagel attributes to Dewey would be a queer variant of phenomenalism, the theory that we know only certain observed rules of succession of that which is *given* in our experience. Only, instead of a Humian succession of impressions, this theory would substitute a succession of the concretely existing individual objects of our ordinary experience.

Professor Nagel is right when he states that Dewey is attempting to construct a theory of science in which scientific objects are defined as "formulations of complex relations of dependence between things in gross experience." And he is also right when he adds: "More specifically, the constructions of theoretical physics are viewed by him as intellectual means for organizing the discontinuous occurrences of directly experienced qualities, as ways of thinking about matters in gross experience in order to obtain some measure of control over their histories."[16] But the question here is what does Dewey mean by "relations of dependence." For Dewey all knowing is of interactions, but the modes of interaction between things in gross experience can hardly be themselves mere "constructions" to be used as "intellectual means." The obvious difficulty with such a theory is that there is a hiatus in the succession of ordinary objects which a *merely* hypothetical set of constructions cannot bridge. The scientist who tried to operate in this way would have no *motive* for postulating unobservable structures and processes, because "electrons," "atoms," etc., if they were merely "ways of thinking," would be bundles of relations without the power to relate. Dewey would have the same objection to this that he does to ordinary phenomenalism: that data, ideas, essences, constructions, are *means* of knowing, they certainly are *not* its subject matter.

This kind of misapprehension of Dewey's meaning is not new. As long ago as 1909 we find him protesting in a letter to William James that the "instrumental theory of knowledge is clearly self-

[16] *Ibid.*, p. 236.

contradictory unless there are independent existences of which ideas take account and for the transformation of which they function."[17] And Professor H. T. Costello tells the story of "a young philosopher saying to Dewey that this side of the moon is a fact, but the other side is an *idea.* John thought that one over for a moment and then said, 'Queer sort of a moon.' "

True we *know* the other side of the moon merely as a conceptual object, but that does not prevent us from believing that it's there. As Professor Nagel himself says, "it is worth noting that there is no incompatibility between maintaining that scientific objects function as conceptual tools in inquiry, and holding that in addition they play a role as elements in the executive order of nature."[18] Dewey would merely wish to amend this by saying that what plays an executive role is not *scientific objects* as such but the interaction of the *substantial objects,* whatever their sort, to which our scientific conceptions refer.

My exposition has, I believe, shown that Dewey never intended to deny the existence of entities such as "molecules," etc. As defined at any given stage of scientific enquiry, *they* may not exist, but if not, something else of the same sort *does* exist. The point is that as "objects of knowledge" scientific objects are conceptual entities, not natural objects. If it is true that an electron microscope has now been invented which renders some molecules visible, seeing molecules would be no different on Dewey's theory, as I understand it, from seeing distant stars through telescopes. The "molecule" seen through the microscope is as much a natural object as a star or a boulder. But *as* seen through the microscope, it is not a "scientific object" any more than the fruitfly in a geneticist's laboratory is a scientific object. The scientific object, be it molecule or fruit-fly, is *what is conceived to be the state of affairs* when one is considering those processes in terms of which chemical or genetic transformations are supposed to occur. Hence, since "scientific objects" do not exist, and all objects that do exist have the same general mode of existence *as* natural objects, be they men, or stars, or atoms, there simply is *no* peculiar epistemological problem of relating our *concepts* of the processes of interaction, denoted by "scientific" objects, to the *actual* processes of interaction of these natural objects. The only real problem is that of the scientist at work, to formulate concepts which will be adequate for the interpretation of what he observes under controlled conditions.

[17] Ralph Barton Perry, *The Thought and Character of William James* (Boston, 1935), II, p. 532.

[18] *Ibid.,* pp. 244–245.

Professor White's criticism of Dewey's attempt to show that there is a continuity between scientific judgments and evaluative judgments is stated in a paper, "Valuation and Obligation in Dewey and Lewis," and also in his book, *Social Thought in America: The Revolt Against Formalism*. He introduces his criticism by means of a comparison of Dewey with Mill. "According to Mill," he says, "an assertion to the effect that *a* is desirable can be proved by showing that *a* is desired." [19] With this Dewey, of course, would not agree. However, in attempting to solve the problem raised by Mill's assertion Dewey falls, Professor White asserts, into an error resembling that of Mill. Professor White summarizes his criticism as follows:

> My chief criticism depends on the fact that the relation between "desirable" and "desired" is allegedly identical with that between "objectively red" and "appears red." But "*a* appears red" and "*a* is objectively red" do not differ in any way which would allow us to say that the first has a merely "*de facto*" quality, whereas the second has a "*de jure*" quality, to use Dewey's language. The fact that *a* is objectively red, to put it in another language, is no more *normative* than the fact that *a* appears red now. And since the fact that *a* is desirable (as Dewey construes it) is related to the fact that *a* is desired in precisely the way that the fact that *a* is objectively red is related to the fact that *a* appears red, it would follow that "*a* is desirable" is no more normative that "*a* is desired." I conclude that Dewey has defined "value" and "desirable" in an interesting way, but that he has not succeeded in construing "desirable" in the sense of "ought to be desired," as he thinks he has. I do not see how the statement "*a* is desired under normal conditions" can be taken as synonymous with "*a* ought to be desired" without taking "*a* appears red under normal conditions" as synonymous with "*a* ought to appear red," but I feel that this consequence is absurd, and hence fatal for Dewey's view.[20]

Thus Professor White's contention (as I understand it) is that Dewey assimilates judgments of the type "*a* is desirable" to those of the type "*a* is objectively red." But this gives us the paradoxical result, he contends, that scientific judgments have themselves a normative character. Whereas Dewey, he thinks, had intended to solve the problem by attempting to "reduce" statements which are *de jure* to *de facto* assertions, he has actually done just the reverse of this. Dewey's argument, thus, commits one to what he believes is the untenable conclusion, "that *all* objectively true statements are normative in character." [21]

Professor White bases this criticism upon the account which Dewey gives of his theory in the tenth chapter of *The Quest for Certainty*. He says he is not aware that any of Dewey's other writing on this subject "supplements the view expressed in *The Quest*

[19] "Value and Obligation in Dewey and Lewis," *loc. cit.*, p. 325.
[20] *Ibid.*, p. 326. [21] *Social Thought in America*, p. 215.

for Certainty in a way that obviates the difficulties in it."[22] Now the whole argument turns upon a point not of ethics but logic, the distinction in meaning between the statements, "*a* appears red" and "*a* is objectively red." One might expect, therefore, that Dewey would pay some attention to this point in his *Logic: The Theory of Inquiry*. In fact, he does in that work discuss this distinction and recur to it in a variety of contexts. Following Professor White's example of sticking to one text, I shall refer in my argument only to the *Logic*. My reply to his criticism will be similar to one already made by Professor Sidney Hook in his article, "The Desirable and Emotive in Dewey's Ethics."[23]

Now Dewey asserts that a quality like *red* is not "inherently general or universal" but becomes such when it is "determined to be capable of application to an indefinite number of singulars not actually present. In and of itself it is particular to the point of uniqueness."[24] Yet all particular propositions such as "This is red" are relational, for such a proposition means that the particular quality referred to is related to other qualities as being one of a certain kind.[25] To ask of what kind a given "this" is means to ask what makes it like certain other "thises" already determined. Hence a singular as a mere "this" can always set a problem. The problem is resolved by ascertaining what kind it is *of*. An act of comparison is involved which in turn requires a standard by means of which the comparison is made. This standard will not itself be another quality. "Color and sound, for example, are concrete when they refer to traits that are properties of existential objects, but in science they are abstract, meaning colority or visibility and audibility as possibilities. In order to be applicable in directing scientific inquiry they are defined in terms of numerical rates."[26] Thus the standard by means of which redness is defined is not itself an existing qualitative trait of some objects, say an apple, but a scientific object, an object of knowledge. I have seen in a laboratory a complicated instrument devised for the purpose of determining the colors of papers produced by manufacturers according to certain specifications as to the degree of whiteness, etc. Clearly, the specifications here for redness or whiteness are not the actual colors of the papers themselves, and it should be equally obvious that the experimental procedures used in testing the colors

[22] "Value and Obligation in Dewey and Lewis," p. 326.

[23] Also printed in *John Dewey: Philosopher of Science and Freedom*, pp. 194–216.

[24] *Logic: The Theory of Inquiry*, p. 293.

[25] *Ibid.*, p. 308.

[26] *Ibid.*, p. 351.

of sample pieces of paper are controlled by a set of norms, a standard *of* redness or whiteness in terms of which the samples are judged to have or not to have a quality of a certain kind.

Now any such statement as "This is red" may evoke the question, "Yes, as a present experience, it looks red but is it *really* red?" The parallel statement would be, "This is desired," and the countering question, "It is desired, but is it *really desirable*?" The point is that what *looks* red is taken to *be* really red until there is *some* reason for doubting it, and that what *is* desired is supposed to *be* really desirable until, again, for *some* reason a doubt is raised. When in either case a situation becomes in this respect problematic, a process of evaluation of what seems to be the case is evoked. "The more problematic the situation and the more thorough the inquiry that has to be engaged in, the more explicit becomes the valuational phase." [27] Such evaluations involve the use of standards whether the judgments be in the field of scientific inquiry or in the determination of a question of conduct. The statements, "This looks red" and "This is desired," when they become *problematic,* can only be evaluated by making judgments which include assertions such as "This is objectively red" and "This is really desirable," statements which are not merely *descriptive* but *prescriptive* as well.

To this criticism, then, Dewey's answer is that any objectively true statement *may* be normative in character, namely when, as might well be the case in "*a* is objectively red," it denotes a standard to be used for the purpose of judging how certain apparent colors may be compared and differentiated. When that which appears red is the material to be analyzed, that which might be seen under specified conditions will be the standard by means of which the apparently red is to be analyzed. Similarly, when that which is desired (appears desirable) is the material to be analyzed, then that which would be desired under certain specified conditions is the standard by which the apparently desirable is to be analyzed. In certain contexts of inquiry both statements, "*a* is objectively red" and "*a* is desirable," may be true because they conform to appropriate norms and within that context have a *de jure* quality.

If I am right in contending that these criticisms by Professor Nagel and Professor White are based on misapprehensions of the real import of Dewey's arguments, then the problem which Dewey has set himself, that of finding a way to overcome the bifurcation of common sense and science, of formulating a theory of inquiry in which this fatal segregation of scientific objects and of value judg-

[27] *Ibid.*, p. 179.

ments will no longer exist, is, in principle, solved. However, a solution of these problems on this high level of generality is, of course, for Dewey only the beginning. To mediate between an enduring past and an insistent future involves the solution in *detail* of the innumerable specific problems in every field of action, wherever these conflicts between tradition and scientific knowledge occur, and preëminently in the fields of education, economics, and politics.

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COMMENTS AND CRITICISM

JOHNSON'S ANALYSIS OF THE GOOD

OLIVER A. JOHNSON, in his discussion of doing good,[1] considers and rejects two theories and offers in their place a third. Some comments are in order respecting all three parts of his paper.

The theory of the deontologists, as Johnson describes it, can be summarized somewhat as follows: Of two alternative courses of action, always choose the one which your intuition tells you it is your duty to choose, even if it appears that the other one would probably produce a greater amount of happiness in the world. He rejects this, partly on theoretical grounds and partly because, if we follow it, "we may be obligated to act in such a way as to make the universe a *worse* place, all things considered, by our action."[2]

Utilitarianism, in Johnson's treatment, consists in the following imperative: Maximize good consequences. He rejects this because "the duties to keep promises, speak truthfully, act justly, etc., confront us with a peculiar stringency which is inexplicable in utilitarian terms alone."[3]

His proposed substitute is this: Of two alternative courses of action, always choose the one that better represents "a way of life which, to borrow a mode of expression in vogue among eighteenth-century moralists, is 'fitting' or 'appropriate' to human beings."[4] He illustrates this by (1) referring to a hypothetical judge who, as between two litigants, "is convinced that justice

[1] "Rightness, Moral Obligation, and Goodness," this JOURNAL, Vol. L (Sept. 24, 1953), pp. 597–608. Italics in quoted passages appear in the original in all cases.

[2] *Ibid.*, p. 603.

[3] *Ibid.*, p. 599.

[4] *Ibid.*, p. 605.

demands that he treat both impartially, but he is equally convinced that somewhat better results will ensue if he favors one over the other"; (2) contending that "the *best* decision and action, all things considered, which the judge could follow in such a situation would be the course of strict justice"; and (3) giving as his reason the fact that a judge who prefers strict justice "exhibits by his action a kind of life which, by being appropriate to human beings, is intrinsically good."[5]

Thus, Johnson rejects deontology because the argument from good consequences has some force, and he rejects utilitarianism because the argument from specific duties (to tell the truth, to be impartial, etc.) has some force. He feels that his proposed substitute—the hypothesis that that act is best which is most appropriate to human beings—recognizes the importance of both duties and consequences.

Comparing his view with utilitarianism, he says: "Our position is not utilitarianism. On the utilitarian theory of obligations all duties are subordinate to one: Maximize good *consequences*. Our theory, on the other hand, states: Maximize the good. It does not, as does the utilitarian position, limit this good to that contained simply in the consequences of action."[6]

Comparing his view with that of the deontologists, he says: ". . . where does our view differ from theirs? . . . We have used the terms fittingness and appropriateness rather than rightness because they directly express the way in which certain types of action, by their relationship to the situations in which they occur, can themselves be intrinsically good. It is right for men to speak the truth because truth-telling represents a type of action fitting to men . . . for us fittingness, appropriateness, and rightness are *all* value-grounded concepts; *no* act can ever be fitting, appropriate, or right in any situation unless it is the act whose performance in that situation makes the greatest possible total contribution to the value of the universe."[7]

It seems pertinent to address the following questions to Johnson with reference to his treatment of this subject:

1. As regards your rejection of deontology: Are there not actually two deontologies, one of which says "Keep your promises though the heavens fall," while the other says more generally "Do your duty though the heavens fall"? And is not your criticism (acting on the deontologists' principle may "make the universe a

[5] *Ibid.*, p. 606.
[6] *Ibid.*, p. 605.
[7] *Ibid.*, p. 607.

worse place") more devastatingly applicable to the first of these deontologies than to the second, especially if the second one means "Do your duty—i.e., try to make the universe a better place"? In brief, have you not thrown out the baby (motives aimed specifically at good consequences) with the bath (vaguely good motives)?

2. As regards your rejection of utilitarianism: Are there not two utilitarianisms, one of which says "Only consequences are significant; motives (the desire to keep promises, to act justly, etc.) can be ignored," while the other says "Only consequences count in judging the value of an act, but motives count in judging the good will of the agent"? And is not your criticism ("the duties to keep promises, speak truthfully, act justly, etc., confront us with a peculiar stringency which is inexplicable in utilitarian terms alone") more devastatingly applicable to the first of these utilitarianisms than to the second?

3. As regards the illustration of your own theory, in which the judge is convinced that "justice demands that he treat both impartially" but "somewhat better results will ensue if he favors one," you apparently have in mind something "better" than the consequences of justice. What is this something better? Is it, for example, the consequences of mercy? If so, why is it that "the *best* decision and action, all things considered, which the judge could follow in such a case would be the course of strict justice"? Would not mercy also illustrate "a kind of life which, by being appropriate to human beings, is intrinsically good"?

4. Cannot the valid emphases of deontology and utilitarianism be satisfactorily combined by saying that (a) in judging whether a man is a good man we must apply the deontologists' principle and ask whether he is a man who does his duty as he sees it, and (b) in judging whether an act is a good act we must apply the utilitarians' principle and ask whether it is an act which will produce the most beneficial results?

The synthesis suggested in the preceding paragraph presupposes a theoretical distinction between the good man and the wise man. The good man is one who does what he *thinks* will produce the greatest possible benefit; he may often be mistaken. The wise man is one who *knows* what will produce the greatest possible benefit; whether he actually does always perform the act which will produce the greatest benefit depends on whether, as Socrates contended, knowledge and virtue coincide. Concerning that view, there is room for debate. But this is not the place for analyzing that particular issue.

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BOOK REVIEWS

Some Main Problems of Philosophy. G. E. MOORE. London: George Allen & Unwin Ltd.; New York: The Macmillan Company [1953]. xii, 380 pp. (The Muirhead Library of Philosophy.) $4.50.

These twenty lectures, given at Morley College in London in 1910–11, might well have been given the title of a celebrated paper which appeared nearly fifteen years later, "A Defence of Common Sense." For one of the main purposes governing the consideration of those problems of philosophy which Professor Moore treats is to defend common-sense beliefs against philosophical attacks. The conception of philosophy which Moore expresses in Chapter I, namely, that its task is to give a description of the universe, will appear out of fashion; but the specific problems to which he introduced his audience are still the persistent and central problems of philosophy, although perhaps not now framed in just his terminology. Moore's unique gift is, as Professor John Wisdom comments in his Foreword to the book, the ability to make one feel those problems, even those which the plain man might consider too remote to be of any interest: problems concerning the external world and problems concerning general ideas. Moore's sense of a problem always determines the focus of his investigations. The problem is the thing and one never loses sight of it, in however much detail he so carefully exhibits its anatomy. Attempts by historical figures to deal with a problem take on a new and fresh aspect in Moore's hands, as in his brilliant re-statement of Kant's antinomies in Chapter IX.

The program set out for the lectures is to describe the kinds of things known to be in the universe, the kinds of things which may be in it but are not known to be, and the relations of these to each other (p. 1). Such a description necessarily covers a wide range of topics: ways of knowing, material objects and the relations of sense data to them, existence in space and time, the concept of infinity, the meaning of "real," imaginary objects, facts and propositions and the relation of true and false beliefs to these, universals. The problem around which the initial lectures are organized arises from the conflict between common-sense beliefs and the views of philosophers: on the one hand, the beliefs (1) that in the universe are material objects, existing in space and time, which are independent of our consciousness of them, (2) that also there exist mental acts, attached to some material bodies but not to others, and occurring at a place and time, and further, (3) that we all *know* these things to be true; on the other hand, the views that we

do not know these two types of things to exist, and even that they do not exist.

Supposing that we do have knowledge of the external world, Moore begins by examining the nature of sense-perception on which such supposed knowledge rests. Analysis of perception should inform us how the evidence of the senses provides what is requisite to "knowledge proper." After describing those acts of "direct apprehension" which are constituents of every perceptual act—those conscious acts of the perceiver when he has before him such objects as tastes, smells, patches of color, pains (i.e., "sense data")—Moore concludes that knowing that material objects exist involves something in addition to these acts. Direct apprehension is not the only way one can have something before one's mind, nor are sense data, which are all that is known to exist in direct apprehension, material objects. To know material objects exist is to know that something besides sense data exists, something with which the data are connected and which the perceiver apprehends only indirectly (pp. 48–51). But is the belief that a material object exists, which according to Moore accompanies the apprehension of data in veridical perception, ever more than a mere belief? Is *knowledge* of a thing beyond the data, of either its existence or its nature, possible? This is the sceptical question, and for the sceptic's negative answer Moore marshals, in the manner characteristic of his honesty, the strongest arguments in its support. Chapters V and VI are given over to a presentation and examination of Hume's two principles: that no one can know of the existence of anything not directly apprehended unless he knows that something he has directly apprehended is a sign of its existence; that no one can know the existence of A is a sign of the existence of B unless he (or someone else) has experienced a general conjunction of things like A and things like B (pp. 108–109). Moore agrees that if both these principles are true, then one cannot know of the existence of a material object (of a thing the like of which one never has had experience, since it is something in addition to the data of which one has had experience). But Moore does not agree that these two principles are true. The argument against them is characteristic, namely, that they are less certain than any of the following: that in perception one knows a material object exists, that a material object does exist, that the experienced sense data are signs of its existence (p. 125).

Without further defense of the common-sense claim to have knowledge of what exists, and without further explication of "indirect apprehension" and "knowledge proper," or any final account of the relation of data to material objects, Moore goes on to

consider a different attack on common sense, namely, that one could not be knowing of the existence of material objects since no such things exist. He turns first to an analysis of the nature of material objects, of *what* we should be knowing about if we did know that they existed. In this analysis (and the analysis of perception) Moore gives the impression of settling a question of fact by a careful inspection. What appears in *Philosophical Studies* and later work as an implied defense of ordinary language appears here undisguisedly as a defense of the truth of common-sense beliefs expressed by ordinary language. The "beliefs" with respect to material objects are: that they are situated in space, that they are not sense data or collections of them, that they are not minds or acts of consciousness (p. 131). Criticisms of views contradicting these beliefs follow. Berkeley's view that shapes cannot exist unless directly apprehended, and Kant's view that shape is not a property which things might have independently of our minds (the mind being so constituted as to make objects appear under spatial forms) are both held to be less certain than that the fingers of one's hands have bones. The Kantian antinomies concerning the beginning of the world and the existence of the world in an infinitely extended space Moore applies to any given object, concluding from them, not that the mind is so constituted as to fall into contradiction about such matters, but that the contradictions (if proved) show that no object can exist in time or space, i.e., can exist. He then examines the supposition, which he says conflicts with common sense, that certain sorts of infinite series are impossible—the lapse of an infinite number of hours before the present moment and the infinite extension of miles from any point (Chapter X).

The view that time is unreal, i.e., that there is no such thing as time at all, so that nothing exists or happens in time, brings Moore to investigate the concept "real"—not that an analysis of "Time is unreal" is as important as the decision as to its truth, but that views as to what "real" means have influenced philosophers' views on what things are real (p. 206). The following argument suggests that a distinction must be made between what *is* and what *is real:* "When I imagine a centaur, I imagine *something,* and what is something must *be* even though unreal. How can what is not real be an object of thought unless it in some sense is?" A similar question arises concerning false beliefs: How can one believe what is not unless *what* is believed *is?* Although on beginning his lectures Moore held that there is a distinction between being and existence, such that all things have the former property and only

some the latter, his conclusion is the opposite (pp. 262, 300). To hold that centaurs are, or that what is falsely believed is, is as much a contradiction of common sense as to hold that they exist. Certain things we think of have no being at all and we are led to suppose the contrary because the expressions for them *appear* to be names (pp. 266, 290). This means that belief cannot be analyzed into an act of belief and an object of belief. We are left with the account of a true belief as one having the relation of correspondence to a fact and a false belief as one corresponding to no fact, without further analysis. "Fact" is so used that there *is* a fact when a belief is true. *The fact that* a proposition is true is a truth, and no truth is mind-dependent (pp. 297–298).

Although "being" and "existence" do not designate different properties, Moore holds that there is a distinction of usage dictated by the *kinds* of things to which they are attributed (p. 300). For example, it is unnatural to say that facts, and universals, exist. Then follow four chapters (XVII–XX) mainly devoted to problems connected with universals: whether there is any identical respect in which white things resemble each other, what the analysis of what is common is, whether there are other kinds of universals than relations and properties which consist in having a relation to something or other, and whether they are mind created, "abstract" objects resulting from the process of abstraction. An appendix written in 1952 corrects what Moore considers to be confusions in Chapters XIX and XX, and continues the investigations made there.

As one reads these lectures one appreciates the privilege which that audience of more than forty years ago had in hearing them. The sources of many of the later papers which had so great an influence on contemporary philosophy are to be found here; and not only this, the lectures provide an example of a philosopher who plainly considered that obscurity is a sign, not of profoundity, but of confusion.

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The Moral Nature of Man: A Critical Evaluation of Ethical Principles. A. CAMPBELL GARNETT. New York: The Ronald Press Company [1952]. viii, 278 pp. $3.75.

It is the theme of this book that the "moral consciousness" of man plays a deeper role in his life than that with which it is credited in most contemporary philosophies. Professor Garnett believes that until an explanation is found for obligation, ethical con-

fusion will continue to flourish. To some extent this complaint seems warranted; for there has been all too much concern with ethical language and value theory, and no thorough treatment of obligation. Part of the neglect of obligation, particularly among American Naturalists, is due to the bad taste that the Kantian theory has left; another part may be attributed to the current positivistic view that a theory of obligation or a theory of value necessarily involves a personal value commitment which one "ought" to avoid. But it is possible to investigate obligation as a natural fact without resurrecting Kant; and, as Professor Garnett recognizes, some value selection is entailed in any type of human activity (including the analysis of language). Thus the problem of obligation is too important to continue to be neglected.

In this work, Professor Garnett examines the growth and history of man's moral ideas; he also seeks to eliminate semantic ambiguities and errors in representative moral theories. But while he succeeds in presenting a provocative study well worth considering for its many rich insights, his own analysis of obligation leaves much to be desired. Professor Garnett's emphasis on the subjective aspect of obligation, his view that moral *effort* (the "inner" moral struggle) or moral good (as distinct from "natural good") is the basic locus of moral theory, is unfortunate. However, this assumption is so widespread in ethical philosophy that Garnett cannot be singled out for special criticism. Garnett affirms that the scientific method in general is the only reliable way to discover truth; but it is doubtful if he himself actually employs it; for his chief interpretation of human nature is dependent on a "speculative" and "subjectivistic" psychology.

Mr. Garnett is so impressed with the inner moral life that he takes "obligation" as the fundamental ethical concept. "Obligation" is "a sociopsychological relation"; it is chiefly experienced as a "requirement to do, or not to do, something . . . some sort of demand or constraint . . . upon the will" (p. 109). Garnett does not believe that obligation can be reduced to an individual's enlightened understanding of his desires or satisfactions. For him, obligation is distinct from "good," although there is a practical relation. His distinction between two types of goods, "natural or non-moral" and "moral," is questionable: (a) "An object is a natural good if, when considered apart from its ethical significance, it reasonably determines a favorable attitude toward itself; and it is an intrinsic natural good if it does this when considered for what it is as immediately experienced" (p. 134). (b) A "moral good" is the highest of intrinsic goods. It is concerned

with action which is subject to voluntary control; and "consists in the effort to find out what we ought to do and to do it" (p. 133). Here motive is important. However, Garnett argues that moral good is concerned with directing our efforts to achieve the most *natural good.* This leads one to wonder in what sense the distinction between obligation and good is as sharp as he makes it. Further, a real question of priority arises, since moral good is only understandable in relation to natural good.

This dependence of obligation and moral good on natural good is even more emphasized when Professor Garnett offers a standard for choosing obligations. Moral good cannot be defined without reference to obligation and right. "A question of right moral conduct must be settled by reference to the facts of obligations existing in the time, place, and circumstances referred to. It is the facts of obligation that constitute the standard" (p. 115). This has two parts: "A subjective standard . . . to do one's best to find out what one's obligations are, and to do one's best to fulfill them" (moral good); and "an objective standard . . . determined by the facts of existing obligations" (p. 117). But our basic obligation is to pursue the widest possible good (natural) for all concerned.

Garnett inquires into the source of this general obligation and grounds it in teleology. This is the heart of his thesis. There is a primary tendency of the feeling-striving process as a whole to produce disinterestedly what seems to the individual to be objectively good. Calvinism in reverse! This moral ought, which is absolute, issues from "the teleological, creative, and object-directed or self-transcending character of the processes that constitute the self" (p. 160). Garnett is taking issue with the naturalistic theory of man—life is not to be characterized as a process of adjustment, but is an expansive striving for the widest possible good.

But in addition to the obligation to discover and produce what would be best for all concerned, we have the obligation to "maintain the inner consistency of our own thought and action" (p. 187). For "the ground of all obligation is the self's own demand for personal integrity" (p. 187). This is a demand felt as constraint "which lies in the essential nature of the feeling-striving processes that constitute the self" (p. 159).

Now purposive categories have had a long and distinguished history. Although tarnished in modern thought they still may be useful, provided, that is, they are interpreted in terms of identifiable behavioristic goals. Mr. Garnett holds that his teleology is

"objective-directed"; but he appears to emphasize the "inner" phase of the striving process—"the mode of experiencing rather than the perceptual entity experienced" (p. 135). But all sorts of methodological difficulties may be involved in this type of psychological approach. How shall we characterize human activities: as subjective processes (fields of consciousness) or in terms of testable interactions? Both subjective and behavioristic theories may refer to the same general subject matter; both accounts present difficulties. It is nigh impossible to get "inside" a person; a functional account *may* leave something out. The behavioristic approach, which Mr. Garnett rejects, perhaps does oversimplify; yet at this stage of inquiry it stands the best chance of enabling us to distinguish between natural goods and bads. For Professor Garnett, however, the difference between good and bad subjective responses is determined by his teleological assumptions. The most intense development of "subjective activity"—aesthetic and intellectual activities as intrinsic natural goods—appears at an advanced stage of human development and is the best.

Garnett further complicates his teleological ethics by giving it an ultimate religious basis. He finds two elements in "moral consciousness": one is the external effect of social conditioning—this he discounts; the other is the "innate" demand that the individual concern himself impartially with the greatest possible good. But what is this will to do good? Garnett implies that all men have it. It is most eloquently expressed in the great religions where it serves in a "very real sense" as "the voice of God" (p. 251). Men at least attribute to God their striving for good. And, for Garnett, religion alone gives a cosmic setting to man's moral life. Hence, for him, the claim to divine authority is of crucial importance. Religious belief is ultimately based upon faith, a faith bolstered by the moral conscience of man. "The belief in such a cosmic spiritual reality arises primarily out of the experience of value and obligation" (p. 254). Professor Garnett believes that there is a need for philosophy to provide a defense of the religious view of the universe. He thinks that religion is to be justified by its role in the moral life of man and that the traditional religious view offers the best moral ideal for mankind. He rejects the "method of intelligence" as a moral ideal because he thinks it is only attainable by a few.

Garnett is in agreement with at least one naturalistic assumption: if there is to be a defense of religion, it must be in great measure in terms of the practical problem of bolstering moral behavior; religion's central function is its moral function. However, the evidence thus far does not enable us to speak with the finality

of Professor Garnett concerning the inability of newer "isms" (including naturalism) to fulfill their functions. This much is evident: we need to know more about the role of religion in life and the necessary structural form it must take (if any) to fulfill its function. Yet there is something curious about Garnett's procedure. He thinks that naturalism fails in its attempt to provide as secure a basis for "ethical universalism" as do the traditional religions. But it is incorrect to say that naturalism has attempted to formulate a "universal and necessary morality" when this is what it has opposed in the tradition. Garnett's position itself rests on insecure grounds. He argues that religious belief grows out of man's moral experience; but he also holds that morality has its ultimate basis in a religious teleology. A very insecure foundation indeed!

Professor Garnett's chief problem is to account for the source of moral effort in man. But talking about a general tendency or attributing it to teleology (although highly suggestive) is fraught with danger, since one may be reading an instinct or faculty back into man. *If* an explanation of the sense of obligation (as distinguished from *specific* obligations) is required, then many factors are no doubt relevant. But this still does not explain the conditions which must be present for particular obligations to arise. Mr. Garnett's theory may tell us that obligations are facts of life, but what else?

Mr. Garnett is impressed by the feeling of constraint. But why must the problem of obligation essentially involve reference to a psychology of "inner compulsion" or an ultimate transcending teleology? Neither provides a verification for moral activities. Professor Garnett maintains that intelligent awareness must guide conduct by taking everything into consideration. But how does this operate if not by exploring the specific conditions and possibilities within a particular situation? To the degree to which reference to a particular context is important in resolving moral questions, a good part of actual deliberation will not turn merely on whether a person feels compelled to do something (as Mr. Garnett recognizes); nor is the "ultimate source" of moral striving relevant; but direct concern with *concrete situations* is of vital importance. But Mr. Garnett's scheme tells little about the actual structure of the situations wherein obligations are encountered. It tells us nothing about biological and social objects, events, and persons to be dealt with. The implication is clear: Must not Mr. Garnett extend his own teleological assumptions to their actualization in the socio-cultural context?

This does not mean that social conditioning is itself a sufficient explanation for the experience of obligation. Mr. Garnett cogently points to problems that all such one-sided explantions of obligation have encountered. It is difficult to find a one-to-one correspondence between a moral obligation and social structure. One must, for instance, take account of any number of factors involved—biological limitations, the responses made by organisms, plus diverse cultural factors (religion, art, science, etc.). Hence, the source of man's "sense of obligation" is a scientific problem as yet unresolved—Garnett's speculative hypothesis notwithstanding.

But there is still a further question. Once a moral idea is embodied in concrete activity, must we not then consider how it functions and whether it is adequate? Perhaps the whole question of the *source* of obligation is ultimately irrelevant, and the question concerning the functions of specific obligations is the fundamental one. It is this question which Professor Garnett does not sufficiently meet and which is the chief failure of his work. Thinking that we need to take account of the feeling of obligation, Professor Garnett attributes it to the nature of man. But his scheme does not explain the apparent lack of a sense of obligation or responsibility in some individuals (especially absent where you have conflicting or changing social demands); nor does it account for the wide diversity in obligations. Garnett discounts these facts. But it is precisely the wide dissimilarities in the *content* of specific moral ideas that is crucial. And it is this fact that undermines Garnett's whole emphasis on the underlying unity of man's moral experience.

Despite these limitations, however, the reader will find both a lively and systematic discussion of the major issues in ethics. Professor Garnett's keen perception of the complexities involved and his cautious and qualified approach do much to make this work an outstanding contribution to ethical inquiry. Contrary to what the preface recommends, it is doubtful if this book is adaptable for beginning students. However, it should be of great interest to those seriously interested in fresh ethical investigation.

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Ethics. A. C. EWING. New York: The Macmillan Company [1953]. vii, 183 pp. $1.50.

With his usual precision and economy A. C. Ewing has presented for the general reader an outline of the ethical theories around which contemporary disputes center. His discussion moves

rapidly through the usual dialectic of Hedonism, Utilitarianism, Kantian ethics, and comes to rest with the recent theories of Moore, Ross, and the writer's own proposal that a non-naturalistic ethics based on "ought" is the most adequate formulation. The remainder of the book is devoted to an examination of naturalistic ethical theories, the nature of ethical judgments, the problem of determinism and punishment.

Professor Ewing has two purposes in restating briefly arguments and analyses treated more fully in his other writings: to provide an introduction to philosophical thought by way of a discipline immediately meaningful to every individual; to help his readers understand the interdependence of science and ethics. "Recent history has instructed us sufficiently in the lesson that scientific knowledge is a curse to the world and not a blessing if its results are utilized without regard to the principles of ethics" (p. 8).

Throughout the book Professor Ewing argues that although ethics cannot be reduced to a science, there are, nevertheless, truths of ethics which can be and have been discovered. The problem which receives most attention in this connection is the precise nature of ethical judgments. The author maintains that ethical judgments have objective validity, that not only de we "claim that the attitudes we approve emotionally and try to induce others to adopt" (p. 123) ought to be adopted objectively, but further that "our ethical judgments are not justified unless they are true" (p. 125). The question is how we establish them as true. Professor Ewing assumes that some kind of intuition underlies ethical judgment. Twice he compares mathematics and ethics (pp. 103, 124) in order to make the point that the truths of both disciplines developed out of a primitive awareness of their existence, although they were clearly understood only after a certain training and analytical reflection had taken place. With the greater maturity of both civilization and individuals reason is able to discover more and more of the truths of ethics. Although this discovery begins with and is in part supported by intuition, we cannot rest content with that method since it is fallible (p. 139). It must therefore be augmented by some kind of empirical testing method (p. 140). The errors we are liable to in ethics, as in empirical science, can be corrected through the balancing of probabilities against each other. Although "we cannot usually thereby *prove* which act is right or which event or theory is more probable" (p. 142) we can at least in ethics as in science arrive at judgments which are

"practically certain, i.e. so near certainty that we need not bother about the difference . . ." (p. 140).

When the discussion is concluded the reader wonders if there is really any essential difference between science and ethics. However, there is a difference, we are told—a difference which lies not in the cognitive nature of their assertions, since both make statements which are true or false, but in the "methods of determining their validity and in the kind of thing they assert" (p. 135). Ethical judgments are unique in the obligations which they pronounce; ethical interests are clearly different from scientific interests in the narrow sense. But on the problem of determining the validity of ethical judgments there is not such a clear distinction that can be drawn. Here Professor Ewing makes evident what the difficulties are without doing away with them. Perhaps they arise over the relationship between ethical judgments and a theory of ethics.

Individual ethical judgments are validated in the same way as judgments in the sciences, but "the criterion of the truth of a theory of ethics is its ability to make into a coherent system as much as possible of our ethical intuitions (common-sense ethics)" (p. 133). There appears to be a conflict here between the validation of individual ethical judgments according to some probabilistic method as in the sciences, and the logical coherence of an ethical system. For the second demands that ethical judgments be based on intuitions which have been elaborated into a coherent system; while the first demands that individual judgments be tested against some criterion which, though not clearly stated, is comparable to the factual evidence of the sciences. Insofar as it is stated, it is put in terms of the probable outcome of our judgments; but that probable outcome serves to validate the judgments if it conforms to the intuitions of obligation which underlie the coherent ethical system. Those intuitions still need to be supplemented by some empirical testing procedure. The empirical part of ethics, therefore, seems to be reduced to judging the likelihood that a course of action will lead to ethically justifiable consequences which themselves are established only in terms of the system out of which they were generated according to certain basic intuitions.

Yet Professor Ewing wishes to assert more than that because there are, he claims, ethical facts which are perceived immediately as right or wrong. These are at least in part the evidence in terms of which judgments are made and evaluated as true or false. "We just see that one set of consequences or one act is preferable to a suggested alternative after having viewed them as a whole, paying

attention to their factual aspects. The points we adduce on either side do not prove (except in simple cases) that an act is right or wrong, but rather put us in a position in which we have more chance of seeing whether it is right or wrong'' (pp. 138–139). Whatever it is that we ''just see' in those situations is what requires further analysis. If the values are known by intuition we are still left with the problem of how they can be tested by some other method.

The search for relevant evidence in terms of which such judgments can be tested is one of the chief problems which analysis of the ethical situation tries to deal with. This book clearly demonstrates the difficulty of the problem but is not successful in solving it.

The book can be recommended particularly as a stimulating summary of much of recent ethical inquiry, and therefore would be admirably suited to serve as a final reading in an introductory ethics course.

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NEW BOOKS

ADAMS, E. M.: *Logic Problems; a Student's Manual to Accompany Adams' The Fundamentals of General Logic.* New York, London, Toronto: Longmans, Green, 1954. 144 p. Paper $1.60.

CONZE, EDWARD, ed.: *Buddhist Texts through the Ages.* Newly Translated from the Original Pali, Sanskrit, Chinese, Tibetan, Japanese and Apabhramsa. Edited by Edward Conze, in Collaboration with I. B. Horner, D. Snellgrove, A. Waley. New York: Philosophical Library [1954]. 323 p. $7.50.

HOCKING, WILLIAM ERNEST: *Experiment in Education: What We Can Learn from Teaching Germany.* Chicago: H. Regnery, 1954. xvi, 303 p. $5.00.

HOHLENBERG, JOHANNES: *Sören Kierkegaard.* Translated by T. H. Croxall. With Twenty-Eight Illustrations. New York: Pantheon Books [1954]. x, 321 p. $5.00.

JARRETT, JAMES L., and MCMURRIN, STERLING M., eds.: *Contemporary Philosophy; a Book of Readings.* New York: H. Holt [1954]. xvi, 524 p. $5.00.

KAY, J. ALAN: *The Nature of Christian Worship.* New York: Philosophical Library [1954]. 115 p. $2.50.

LINS, MÁRIO: *A evoluçao lógico-conceitual da ciência.* Rio de Janeiro, 1954.

MACIVER, R. M., ed.: *The Hour of Insight: A Sequel to Moments of Personal Discovery.* New York and London: Published by The Institute for Religious and Social Studies, Distributed by Harper [1954]. ix, 145 p. (Religion and Civilization Series.) $2.00.

MUNDY, JOHN HINE: *Liberty and Political Power in Toulouse, 1050–1230.* New York: Columbia Univ. Press, 1954. xiii, 402 p. $6.50.

OLIVER, HENRY M., JR.: *A Critique of Socioeconomic Goals.* Bloomington: Indiana Univ. Press, 1954. vii, 191 p. (Indiana Univ. Publications, Social Science Ser., No. 12.) Paper $2.50, Cloth $3.00.

PACI, ENZO: *Tempo e relazione.* Torino: Taylor, 1954. 313 p. (N. 12 della Collezione di Filosofia.) Lire 1600.

RUNES, DAGOBERT D.: *Letters to My Daughter.* New York: Philosophical Library [1954]. 131 p. $2.50.

RUPP, GORDON: *The Righteousness of God; Luther Studies.* The Birkbeck Lectures in Ecclesiastical History, Delivered in the University of Cambridge, 1947. New York: Philosophical Library [1953]. xiii, 375 p. $7.50.

SCIACCA, MICHELE FEDERICO: *La filosofia oggi.* Seconda edizione, completamente rifatta e aggiornata. Milano: Bocca [1952–54]. 2 vols. (Opere complete di M. F. Sciacca, 2–3.) L. 4.500.

SHELDON, WILMON HENRY: *God and Polarity: a Synthesis of Philosophies.* New Haven: Yale Univ. Press; London: Oxford Univ. Press, 1954. 712 p. $8.00.

THOMAS, R. MURRAY: *Judging Student Progress.* New York, London, Toronto: Longmans, Green, 1954. xii, 421 p. $4.00.

Uncertainty and Business Decisions; a Symposium. By W. B. Gallie, D. J. O'Connor, I. J. Good, G. P. Meredith, C. F. Carter, B. R. Williams, A. D. Roy. Ed. by C. F. Carter, G. P. Meredith, G. L. S. Shackle. Liverpool: Univ. Press [1954]. viii, 104 p. 10s. 6d.